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APPLICATION NO.	F	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/033,073	3,073 12/26/2001		Kohji Yoshie	KON-1703 2772	
20311	7590	11/29/2004		EXAMINER	
MUSERLIA	AN, LUC	AS AND MERCA	YAN, REN LUO		
475 PARK <i>A</i>	VENUE	SOUTH			
15TH FLOO	R			ART UNIT	PAPER NUMBER
NEW YORK	, NY 10	0016	2854	· · · · · · · · · · · · · · · · · · ·	

DATE MAILED: 11/29/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)				
		10/033,073	YOSHIE ET AL.				
Office Act	ion Summary	Examiner	Art Unit				
		Ren L Yan	2854				
The MAILING D	PATE of this communication app		correspondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).							
Status							
2a)☐ This action is <b>FI</b> 3)☐ Since this applic							
Disposition of Claims							
4a) Of the above 5) ☐ Claim(s) 6) ☑ Claim(s) <u>1-14</u> is 7) ☐ Claim(s)	<ul> <li>Claim(s) 1-19 is/are pending in the application.</li> <li>4a) Of the above claim(s) 15-19 is/are withdrawn from consideration.</li> <li>Claim(s) is/are allowed.</li> <li>Claim(s) 1-14 is/are rejected.</li> <li>Claim(s) is/are objected to.</li> <li>Claim(s) are subject to restriction and/or election requirement.</li> </ul>						
Application Papers							
10) The drawing(s) f  Applicant may not  Replacement draw	is objected to by the Examiner iled on is/are: a) accept accept and any objection to the owing sheet(s) including the correction aration is objected to by the Ex	epted or b) objected to by the drawing(s) be held in abeyance. S on is required if the drawing(s) is o	See 37 CFR 1.85(a). Objected to. See 37 CFR 1.121(d).				
Priority under 35 U.S.C.	§ 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  a) All b) Some * c) None of:  1. Certified copies of the priority documents have been received.  2. Certified copies of the priority documents have been received in Application No  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  * See the attached detailed Office action for a list of the certified copies not received.							
Attachment(s)  1) Motice of References Cite		4) 🔲 Interview Summa					
	Patent Drawing Review (PTO-948) atement(s) (PTO-1449 or PTO/SB/08)	Paper No(s)/Mail 5)  Notice of Informa 6) Other:	Date il Patent Application (PTO-152)				

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## **DETAILED ACTION**

Applicant's election without traverse of Group I, claims 1-14 in the reply filed on 9-3-2004 is acknowledged.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1, 3, 9-11 and 14 are rejected under 35 U.S.C. 102(e) as being anticipated by

Okamoto et al(6,430,382). The patent to Okamoto et al teaches the structure of an image
forming apparatus with a hole-punching processor as claimed including an image forming
section to form an image on a sheet, an ejecting section to eject the sheet after being printed and
a hole-punching processor unit 50 for punching a hole on a sheet in a conveying path and for
conveying the sheet through the hole-punching processor unit. The hole-punching processor unit
50 has hole-punching rollers 40 and 41 that move in a direction perpendicular to a conveyance
direction of the sheet and has a sheet-edge detector 43 to detect a side-edge of the sheet in a
direction parallel to the conveyance direction of the sheet. The hole-punching rollers 40 and 41
move with the sheet-edge detector 43 to the center of the sheet, based on the positional
information of the side-edge detected by the sheet-edge detector 43, to punch a hole in the sheet.
See Figs. 6-8 and column 8, line 59 through column 9, line 37 in Okamoto et al for details. With
respect to claim 3, Okamoto et al teach in column 9, lines 27-30 that when a leading edge of the
sheet reaches to the hole-punching processor unit 50, the hole-punching rollers and sheet edge

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detector move in a direction perpendicular to the sheet conveyance direction so that the sheet-edge detector detects a position of the side-edge of the sheet. With respect to claims 10 and 14, Okamoto et al teach to move the sheet-edge detector 43 to a home position as shown in Fig. 8F after the hole-punching operation on a sheet and in case of a non-punching mode, the hole-punching rollers 40 and 41 are not rotated and sheets can be fed through the gap between the rollers without being punched. See the first sentence in column 9.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 2 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okamoto et al in view of Suzuki et al((5,182,861). Okamoto et al teach all that is claimed except for the use of multiple sheet-edge detectors each corresponds to a different sheet size as recited. Suzuki et al teach in a sheet drafting apparatus the conventionality of using a plurality of sheet edge detectors 90 each corresponds to a different sheet width size for detection of the sheet edge. See Fig. 1 and column 3, lines 51-53 in Suzuki et al for example. It would have been obvious to one of ordinary skill in the art to provide the image forming apparatus of Okamoto et al with the plurality of sheet-edge detectors appropriately disposed as taught by Suzuki et al so as to reduce the travel distance otherwise required of a single detector in order to suit for different width size sheets being printed.

Claims 4, 6, 7 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okamoto et al in view of Kamada et al(4,789,903). Okamoto et al teach all that is claimed

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except that the sheet-edge detector is not used to detect the leading edge and trailing edge of the sheet and it is unclear the type of sheet-edge detector is used. The patent to Kamada et al teaches in an image forming apparatus the conventional use of a reflection type photo detector to detect the leading edge, the trailing edge and the side edge of the recording paper sheet. See the paragraph bridging columns 7 and 8 in Kamada et al for example. In view of the teaching of Kamada et al, it would have been obvious to those having ordinary skill in the art to provide the image forming apparatus of Okamoto et al with the reflection type photo detector capable of detecting the leading edge, the trailing edge and the side edge of the sheet so as to simplify the structural requirement of the image forming apparatus.

Claims 5 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Okamoto et al in view of Kamada et al as applied to claims 4 and 7 above, and further in view of Suzuki et al. Okamoto et al, as modified by Kamada et al, teach all that is claimed except for the use of multiple sheet-edge detectors each corresponds to a different sheet size as recited. Suzuki et al teach in a sheet drafting apparatus the conventionality of using a plurality of sheet edge detectors 90 each corresponds to a different sheet width size for detection of the sheet edge. See Fig. 1 and column 3, lines 51-53 in Suzuki et al for example. It would have been obvious to one of ordinary skill in the art to provide the image forming apparatus of Okamoto et al, as modified by Kamada et al, with the plurality of sheet-edge detectors appropriately disposed as taught by Suzuki et al so as to reduce the travel distance otherwise required of a single detector in order to suit for different width size sheets being printed.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ren L Yan whose telephone number is 571-272-2173. The

examiner can normally be reached on 8:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Andrew Hirshfeld can be reached on 571-272-2168. The fax phone number for the

organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ken yan

**Primary Examiner** 

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Ren Yan

Nov. 23, 2004